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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/697,539	10/29/2003	Pascal E. Garrido	01-37	7562

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EXAMINER

MARSH, STEVEN M

ART UNIT PAPER NUMBER

3632

DATE MAILED: 06/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/697,539

Applicant(s)

GARRIDO, PASCAL E.

Examiner

Steven M Marsh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☒ Claim(s) 1 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

This is the first office action for U.S. Application 10/697,539 for a Drive Nut and Screw for Seat Adjuster filed by Pascal E. Garrido on October 29, 2003.

Claim Objections

Claim 1 is objected to because of the following informalities: Line 9 of claim 1, the word "protion" should be deleted and replaced with - - portion - -. Line 12 of claim 1, the word - - said - - should be inserted before "aperture". Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 6 and 11-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Line 1 of claim 6 reads, "A linkage assembly as claimed in claim wherein". For examination purposes it is assumed that claim 6 is dependent upon independent claim 1. Claim 11 recites the limitation "the slot" in line 12. There is insufficient antecedent basis for this limitation in the claim. Claims 15 and 17 both appear to contain limitations directed towards the method of positioning the drive nut in relation to the first and second links. However, the claims are structure claims directed towards the linkage assembly. In Claim 18, Applicant claims "a linkage

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assembly according to claim 17” and then claims “a linkage assembly as claimed in claim 1”. It is not clear what Applicant is claiming because claims 1 and 17 both claim linkage assemblies and therefore claim 18 is claiming two linkage assemblies. The claim has been examined to the best extent possible.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 11-14 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 5,172,601 to Siegrist et al. Siegrist et al. discloses a vehicle seat linkage assembly with a rod (40) connected to a drive motor (30). The linkage assembly has a first link (52) with an aperture (56 on one side) and a second link adjacent (52 on the other side), but spaced from the first link, with a portion forming a slot (56) that has a keyhole slot opening. Each link has a portion forming an inner peripheral surface and defining a transverse axis between the first and second link. The first link and second link are attached to a frame (50) and there is a drive nut (42) adjacent to the first and second link. The slot and aperture are in alignment with each other and the slot has a portion forming an arcuate portion and a guide portion in communication with the circular portion. The drive nut (42) is adjacent to the rod and has a body portion (70), opposite lateral projections (74), and a portion engaging the rod (72). Claim 17 has

limitations directed towards the method of operating the drive nut in relation to the first and second link. However, claim 17 is directed towards the structure of a linkage assembly, and therefore the method limitations are given no patentable significance.

Siegreß et al. discloses a method for connecting first and second seat members comprising: providing a threaded drive nut (42); providing a pair of spaced apart links (52) on one of the first seat member and second seat member; moving the drive nut and rod; moving a projection end relative to a transverse axis; and rotating the drive nut. Claims 11-14 contain limitations directed towards the structure of the drive nut and the links. However, a method of connecting a first seat member to a second seat member is claimed and the structural limitations are given no patentable significance.

Claim Rejections - 35 USC § 103

Claims 1-10, 15, 16, and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,172,601 to Siegrist et al. in view of U.S. Patent 6,502,798 B1 to Frohnhaus et al. Siegreß et al. teaches a body portion that has a threaded aperture and the rod has a threaded portion that engages the threaded aperture. The drive nut and rod are movable so that the longitudinal axis is positioned normal to the lateral axis to insert one projection into the slot, and to position the other projection adjacent, but spaced away from the aperture while one projection is in the slot.

The slot has a circular portion and a pair of opposing straight-sided portions (58) in communication with the circular portion. The one end and another end of the body have a circular section with a pair of opposing flattened sides. The width of the

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flattened sides is of size to pass through the straight-sided portions of the slot and the diameter of the circular section is sized to fit within the circular portion of the slot. One of the one side and the opposite side of the body portion can pass through the slot when the body portion is moved toward the aperture and once the one end is disposed in the circular portion and another end is disposed in the aperture, the drive nut is rotated so that the one end and the another end are prevented from being withdrawn from the slot and aperture. Claim 15 has limitations directed towards the method of operating the drive nut in relation to the first and second link. However, claim 15 is directed towards the structure of an adjuster, and therefore the method limitations are given no patentable significance.

Siegrist et al. does not disclose a first link with an enclosed aperture for receiving an end of the drive nut. Frohnhaus et al. discloses a vehicle seat frame that has first and second side parts (20 and 22). The first side part has an enclosed aperture (30) and the second side part has a location recess. Frohnhaus discloses that a free end of the shaft is inserted into the enclosed aperture (30) and the other end is inserted into an opening in the location recess. It would have been obvious to one of ordinary skill in the art at the time of the present invention to have used the teaching of Frohnhaus and provided an enclosed aperture in one of the links taught by Siegrist et al., for the purpose of providing a method of further securing the drive nut to the link assembly. Siegrist et al. discloses an arcuate portion on the inner surface, but it does not specifically disclose that the inner surface includes an arcuate portion that is at least 85 or 90% of the inner surface. However, the exact dimensions are a matter of

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engineering preference and would have been obvious to one of ordinary skill in the art at the time of the present invention. Siegrist et al. also fails to disclose a drive nut with a circular section with two flattened sides and sections. However, Siegrist et al. teaches a body portion with a circular cross section. Providing flattened sides and sections on the circular section is a matter of design preference and would have been obvious to one of ordinary skill in the art at the time of the present invention.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent 4,693,128 to Plow

U.S. Patent 6,290,199 B1 to Garrido et al.

U.S. Patent 5,292,164 to Rees

U.S. Patent 5,797,293 to Chaban

U.S. Patent 5,445,354 to Gauger et al.

U.S. Patent 5,456,439 to Gauger

U.S. Patent 6,105,920 to Gauger

The above patents disclose various types of drive nut assemblies.

Any inquiry concerning this communication or earlier communications from the

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examiner should be directed to Steven Marsh whose telephone number is (703) 305-0098. The examiner can normally be reached on Monday-Friday from 8:00AM to 4:30 PM. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-2168. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Shh

Steven M. Marsh

June 19, 2004



LESLIE A. BRAUN
SUPERVISORY PATENT EXAMINER